300 females), in summer females were more in number than males (90 males:98 females) as compared to winter (220 males:200 females). The overall male to female ratio was 102:100 with 110:100 in winter and 91:100 in summer. Our results contradict the previous study (Javed and Rahmani 2000), where observed male to female ratio was 0.75:1.0 (n = 465) with 0.90:1.0 (n = 48) in winter and 0.72:1.0 (n = 417) in summer, but favours the congregation pattern observed by Collias and Collias (1967) in other moist deciduous forests in India. Maximum flock size of 11 birds was observed in sal forest both in winter and summer. However, Javed and Rahmani (2000) observed a bigger flock size of 20 individuals in winter in the DNP. Overall flock size was found to be 3.14 ± 0.14 S.E. Mean flock size was highest in winter (3.32 ± 0.18 S.E.) as compared to summer (2.84 ± 0.23 S.E.) and the difference was not significant. Among different habitats, mean flock size was highest at forest edges (3.24 ± 0.14 S.E., n = 29) followed by grassland (3.22 ± 0.53 S.E., n = 22), sal forest (3.21 ± 0.23 S.E., n = 84), mixed forest (3.08 ± 0.27 S.E., n = 46) and teak forest (2.76 ± 0.32 S.E., n = 21), and the difference was not significant. During the study on three occasions, Red Junglefowl were found copulating with the domesticated varieties found near human habitations in Dudhwa range. Thus, supporting the hypothesis put forth by Peterson and Brisbin (1998) that Red Junglefowl have hybridized with domesticated forms and that the hybrid genes have introgressed into wild populations, thereby contaminating the wild gene pool. Although, Kaul *et al.* (2004) observed 63 Red Junglefowl in different zoos of India, and concluded that all the birds have physical characteristics of a true junglefowl and considered them as true. Thus, we recommend a detailed genetic study of wild population not only in Dudhwa, but in the entire distribution range to check the contaminated level in true genetic traits of Red Junglefowl in the wild.

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4. AN UNUSUAL CASE OF MOULTING IN AN INDIAN FLAP-SHELL TURTLE *LISSEMYS PUNCTATA* (LACEPÉDE, 1788)

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On January 01, 2008, I procured a live specimen of an Indian Flap-shell Turtle *Lissemys punctata* from a fish market at Chetla road, Kolkata, West Bengal. As the species is protected under Schedule I of the Indian Wildlife (Protection) Act, 1972, the specimen was kept in a Snake Park for observation.

The turtle was kept in a tub (61cm in diameter and 15 cm in depth) with little water and *Ipomoea aquatica*. The turtle at times came out of the tub and moved freely in the room, preferably in darker places. On February 25, 2008, it disappeared and could not be found anywhere. On October 28, 2008 (almost 8 months later) the turtle reappeared and was found crawling on the floor. The turtle appeared to have survived without food and water during this period. Flap-shelled turtles are adapted to long periods of drought (Grazimek 2003) and are able to withstand prolonged starvation, and it was reported that a captive specimen lived for 2 years without food (Daniel 2002).

Fig. 1: Unusual moulting of the Turtle carapace

Fig. 2: The intact carapace shed by the turtle

After reappearing, the turtle looked dry and dirty. I washed it under running water and kept it in a bucket with water and *Ipomoea aquatica*, which was devoured instantly. A few white patches had appeared on the carapace of the turtle, and a few days later it casted its skin (Fig. 1). The casting process began with the soft parts (legs, neck folds) followed by the plastron and carapace. In case of the legs, neck folds, and plastron the skin was cast in small pieces, but the carapace skin was shed all at once (Fig. 2). The skin was completely casted in about 23 days (January 03-25, 2009).

In biology, moulting signifies the manner in which an animal routinely casts off a part of its body (often, but not always, an outer layer or covering), either at specific times of the year or at specific points in its life cycle.

Turtles and terrapins do not moult their skins all at once, as snakes do, but continuously in small pieces (Alderton 1986). Tortoises also shed skin, but a lot of dead skin is allowed to accumulate in thick knobs and plates that provide protection to parts of the body outside the shell (Gilbert *et al.* 2001).

This case of unusual shedding of the carapace of the flap-shell turtle may be due to the proionged starvation and desiccation for eight months. The turtle may have developed calcium deficiency and the outer layer of the carapace came off in one single piece (Kaplan 2009).

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